

**REMARKS**

Claims 1, 3-17, 19-33, 35, and 36 are all the claims presently pending in the application.

Applicant gratefully acknowledges that **claims 1, 3, 21, 27, 29, and 36** are **allowed** and that **claim 25** is **allowable**.

Claims 4-6, 19, 20, 22-25, 28, and 30 have been amended to make minor editorial amendments to clarify the language and punctuation of the claims, in accordance with the Examiner's suggestions, thereby obviating the objections to these claims.

Claims 19, 20, 22, 26, and 30 also have been amended to define more clearly and particularly the features of the claimed invention, thereby overcoming the rejections under 35 U.S.C. § 112, first and second paragraphs.

Dependent claim 35 is amended to depend from claim 28 instead of previously canceled claim 34.

It is noted that the claim amendments are made only for more particularly pointing out the invention, and not for distinguishing the invention over the prior art, narrowing the claims or for any statutory requirements of patentability. Further, Applicant specifically states that no amendment to any claim herein should be construed as a disclaimer of any interest in or right to an equivalent of any element or feature of the amended claim.

Claims 26 stands rejected under 35 U.S.C. § 112, first paragraph.

Claims 4-17, 19, 20, 22-24, 28, 30-33, and 35 stand rejected under 35 U.S.C. § 112, second paragraph.

These rejections are respectfully traversed in the following discussion.

**I. THE 35 U.S.C. §112, FIRST PARAGRAPH REJECTION**

Claim 26 stands rejected under 35 U.S.C. §112, first paragraph, as failing to comply with the written description requirement.

Claim 26 is amended above to overcome this rejection.

Applicant submits that the specification clearly describes in such a way as to reasonably convey to one skilled in the relevant art that the inventors, at the time the application was filed had possession of the claimed invention, including “*a correlator comprising: a first sub-correlator... and a comparator..., wherein said comparator includes a second sub-correlator*”, as claimed in claim 26 (e.g., see specification at page 28, lines 5-22; see also Figure 6)

In view of the foregoing, the Examiner is respectfully requested to reconsider and withdraw this rejection.

Since no prior art rejections have been raised with respect to claim 26, Applicant submits that claim 26 is now in condition for immediate allowance.

## II. THE 35 USC §112, SECOND PARAGRAPH REJECTION

Claims 4-17, 19, 20, 22-24, 28, 30-33, and 35 stand rejected under 35 U.S.C. § 112, second paragraph.

With respect to the relation of “*m*” to the other elements of claims 4-17, 19, 20, 22-24, 28, and 30, Applicant notes that the claims clearly define that the “*first sub-correlator... detects a correlation value between a k-th ( $0 < k < K$ ) symbol including an *M* chip length, among said fixed pattern, and pseudorandom noise code *S<sub>m</sub>*, wherein *m* comprises an integer defined as  $k \times M < m < ((k + 1) \times M)$  and *M* and *K* comprise predetermined positive integers*”, as recited, for example, in claim 4 (emphasis added).

Moreover, the specification clearly describes an exemplary aspect of the invention in which the first sub-correlator 10 has a length of *M* chips, and outputs a correlation value between a k-th ( $0 \leq k \leq K - 1$ ) symbol among a received fixed pattern and pseudorandom noise code *S<sub>m</sub>* (*m* is an integer defined as  $k \times M \leq m < ((k + 1) \times M)$ ) (e.g., see specification at page 15, lines 19-22; emphasis added).

Thus, Applicant submits that the ordinarily skilled artisan would know and understand the metes and bounds of claims 4-17, 19, 20, 22-24, 28, and 30. Therefore, the Examiner is requested to withdraw this rejection.

With respect to claims 4, 5, 8, 10, 12, 14, 16, 19, 22, and 23, Applicant respectfully submits that these claims clearly and particularly define that the “*first sub-correlator that receives a fixed pattern including a code length  $N$  ( $N = M \times K$ ), as an input signal comprised of signals obtained by spreading a fixed word having a length of  $K$ , at a rate of  $M$  chips/symbol, and detects a correlation value between a  $k$ -th ( $0 < k < K$ ) symbol including an  $M$  chip length, among said fixed pattern, and pseudorandom noise code  $S_m$ , wherein  $m$  comprises an integer defined as  $k \times M < m < ((k + 1) \times M)$  and  $M$  and  $K$  comprise predetermined positive integers*” (emphasis added; e.g., see also specification at page

Applicant submits that the language of the claims themselves, and further the disclosure of the specification, clearly describes the relationships between the elements of the claims. It is unclear to Applicant what the Examiner considers to be unclear about the language of the claims and the supporting disclosure, which includes exemplary aspects of these claims.

Should the Examiner persist in the rejection of these claims, Applicant respectfully requests that the Examiner provide an explanation of what the Examiner deems to be unclear in the supporting disclosure and/or the language of the claims.

For the foregoing reasons, Applicant respectfully submits that the ordinarily skilled artisan, after a thorough reading of the specification with reference to the claims, clearly would understand and know the metes and bounds of the claimed invention.

With respect to claims 28 and 31-33, Applicant submits that these claims clearly and particularly define that the “*first sub-correlator receives a fixed pattern including a code length  $N$ , as an input signal comprised of signals obtained by spreading a fixed word including a length of  $K$  symbols, at a rate of  $M$  chips/symbol*” as recited, for example, in claim 28 (emphasis added). Applicant submits that the ordinarily skilled artisan clearly would know and understand the metes and bounds of this feature of the claimed invention, as defined by claims 28 and 31-33.

With respect to the “*rate of  $M$  chips/symbol*”, Applicant notes that the specification clearly describes that an exemplary correlator which receives a fixed pattern  $C_n$  having a

length  $N$  ( $N = M \times K$ ) which fixed pattern includes signals generated by spreading a fixed words having a length of  $K$  symbol at a spreading ratio of  $M$  chip/s/symbol and outputs a correlation value (e.g., see specification at page 15, lines 12-17). The specification also exemplarily defines the spreading ratio  $M$  (e.g., see specification at page 16, lines 4-8).

Thus, Applicant submits that the ordinarily skilled artisan clearly would know and understand the metes and bounds of the claimed invention, as defined by claims 28 and 31-33.

Claim 30 is amended to define more clearly the features of the invention, thereby overcoming the rejection under 35 U.S.C. § 112, second paragraph. Therefore, the rejection of claim 30 should be withdrawn.

Claim 35 is amended to properly depend from claim 28. Therefore, the rejection of claim 35 also should be withdrawn.

For the foregoing reasons, Applicant submit that a person of ordinary skill in the art clearly would know the metes and bounds of the subject matter of claims 4-17, 19, 20, 22-24, 28, 30-33, and 35.

In view of the foregoing, the Examiner is respectfully requested to reconsider and withdraw this rejection.

Since no prior art rejections have been raised with respect to claims 4-17, 19, 20, 22-24, 28, 30-33, and 35 are now in condition for immediate allowance.

### **III. FORMAL MATTERS**

#### **A. Drawing Objections**

The Office Action objects to the drawings because the maximum detecting circuit is illustrated in Figure 2, instead of Figure 5, as described in the specification at page 26, lines 9-14. Applicant has amended the specification to properly identify the maximum detecting circuit 1000 as being illustrated in Figure 2, thereby obviating this objection to the drawings.

The Examiner also objects to the drawings as not showing the “*maximum detecting means*” as recited in claims 3, 19, and 11. However, as set forth in the Amendment under

37 C.F.R. § 1.116 filed on October 28, 2004, Applicant again notes that the claimed “*maximum detecting means*” is exemplarily illustrated by the maximum detecting circuit 1000, which is illustrated in Figure 2 of the application. Thus, an exemplary aspect of the claimed “*maximum detecting means*” clearly is illustrated in the drawings in full compliance with 37 C.F.R. § 1.83(a).

Accordingly, Applicant respectfully requests that the Examiner withdraw these drawing objections and approve the drawings.

#### **B. Claim Objections**

The Office Action objects to claims 4-6, 19, 20, 22-24, 28, and 30. Applicant has amended these claims merely to add parentheses in accordance with the Examiner’s suggestion, thereby obviating the Examiner’s objection.

The Office Action also objects to claim 19, lines 12-13, and claim 20, lines 15-16. Applicant has amended claims 19 and 20 merely for clarification in accordance with the Examiner’s suggestion, thereby obviating the Examiner’s objection.

The Office Action also objects to claim 22, lines 12-13. Applicant has amended claim 22 merely for clarification in accordance with the Examiner’s suggestion, thereby obviating the Examiner’s objection.

The Office Action also objects to claim 25, line 8. Applicant has amended claim 25 merely for clarification in accordance with the Examiner’s suggestion, thereby obviating the Examiner’s objection.

Therefore, the Examiner is requested to withdraw the claim objections and to permit claims 4-6, 19, 20, 22-25, 28, and 30 to pass to immediate allowance.

#### **IV. CONCLUSION**

In view of the foregoing, Applicant submits that claims 1, 3-17, 19-33, 35, and 36, all the claims presently pending in the application, are patentably distinct over the prior art of record and are in condition for allowance. The Examiner is respectfully requested to pass the above application to issue at the earliest possible time.

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Should the Examiner find the application to be other than in condition for allowance, the Examiner is requested to contact the undersigned at the local telephone number listed below to discuss any other changes deemed necessary in a telephonic or personal interview.

The Commissioner is hereby authorized to charge any deficiency in fees or to credit any overpayment in fees to Attorney's Deposit Account No. 50-0481.

Respectfully Submitted,

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